

## AMENDMENTS TO THE CLAIMS

Please replace the pending claims with the following claim listing:

1. **(Currently Amended)** A wavelength multiplex transmission system having a transmission apparatus and a receiving apparatus connected via an optical transmission line to transmit an input signal, wherein:

the transmission apparatus is configured to convert differential signals of the input signal to separate optical signals to transmit to the optical transmission line; and

the receiving apparatus is configured to receive the separate optical signals from the optical transmission line to reproduce the differential signals and further configured to adjust a time difference between the reproduced differential signals.

2. **(Previously Presented)** The wavelength multiplex transmission system according to claim 1, wherein the receiving apparatus further combines the reproduced differential signals to reproduce the input signal.

3. **(Canceled)**

4. **(Currently Amended)** A wavelength multiplex transmission system having a transmission apparatus and a receiving apparatus connected via an optical transmission line, wherein: the transmission apparatus comprises:

(N+M) optical transmitters (where N is an integer of 2 or more and M is an integer from 1 to N) for transmitting a plurality of input signals as optical signals with different wavelengths,

M differential dividers for differentially dividing M input signals out of the plurality of input signals, respectively, and inputting the differentially divided signals into  $2 \times M$  optical transmitters out of the (N+M) optical transmitters, respectively, and a wavelength multiplex filter for wavelength multiplexing and outputting the (N+M) optical signals from the (N+M) optical transmitters, and wherein:

the receiving apparatus comprises:

a wavelength separation filter for separating the wavelength multiplexed optical signals to output (N+M) optical signals;

(N+M) optical receivers for receiving the (N+M) optical signals from the wavelength separation filter, respectively, to output (N+M) output signals; [[and]]

M differential combiners, each differentially combining the output signals from the two optical receivers receiving a pair of optical signals which have been differentially divided and transmitted, out of the (N+M) optical receivers, to output one signal; and

a delay time controller for adjusting delay time difference between a pair of optical signals on the optical transmission line, at the preceding stage of the differential combiner.

5. **(Previously Presented)** The wavelength multiplex transmission system according to claim 4, wherein the transmission apparatus has two corresponding differential signals from one differential divider as inputs to two optical transmitters, respectively, and transmits the two differential signals as separate optical signals with adjacent wavelengths.

6-11. **(Canceled)**

12. **(Currently Amended)** A receiving apparatus for receiving optical signals including differential signals of a signal, comprising:

optical receiving means for receiving the optical signals; [[and]]

optical conversion means for reproducing the differential signals from the optical signals signals;

differential combining means for combining the reproduced differential signals; and

time difference control means for adjusting time difference between the reproduced differential signals.

13. **(Previously Presented)** The receiving apparatus according to claim 12, wherein:

the differential signals are wavelength-multiplexed as separate optical signals with different wavelengths; and

the optical conversion means reproduces the differential signals from the separate optical signals.

14-15. **(Canceled)**

16. **(Currently Amended)** A receiving apparatus comprising:

a wavelength separation filter for separating a wavelength multiplexed optical signal to output (N+M) optical signals (where N is an integer of 2 or more and M is an integer from 1 to N);

(N+M) optical receivers for receiving the (N+M) optical signals from the wavelength separation filter, respectively, to output (N+M) output signals; [[and]]

M differential combiners, each differentially combining the output signals from two optical receivers receiving a pair of optical signals out of the (N+M) optical receivers, to output one signal; and

a delay time controller for adjusting delay time difference between the pair of two optical signals on the optical transmission line, at the preceding stage of the differential combiner.

17-21. **(Canceled)**